

REMARKS

Claims 1-7 are pending and stand rejected as anticipated by Abe U.S. Pat. No. 5,627,807 or obvious from Abe in view of Park U.S. Pat. No. 6,049,513. Claim 1 is amended to read as follows:

1. A method for adjusting a focus bias in an optical disc drive, comprising the steps of:
rotationally driving an optical disc in a state that only a focus servo is engaged without engaging a tracking servo;
driving an actuator of an optical pick-up so that a laser beam projected from the optical pick-up is moved in a tracking direction, thereby intentionally creating a pseudo state resembling a state in which the tracking servo is being actually engaged so as to obtain an HF signal in such state; and
~~determining a focus bias by which a proper focusing point can be obtained based on the HF signal~~
adding a focus bias to the thus obtained HF signal to vary a focus bias value so that the amplitude of the HF signal is increased or decreased; and
determining an optimum focus bias at which the largest amplitude of the HF signal is obtained.

Note that the added limitation is supported on page 4, lines 1-8 and page 6, lines 24-30.

As clearly defined in the amended claim 1, the present invention includes the use of HF signal for determining an optimum focus bias. The optimum focus bias is obtained based on the largest amplitude of the HF signal. In this regard, it is to be noted that HF signal is obtained from optical discs in which any data is recorded and a point at which the amplitude of the HF signal becomes largest is easily obtained. Therefore, according to the present invention, it is possible to easily obtain an optimum focus bias.

In contrast, in Abe (U.S. Pat. No. 5,627,807), a traverse level VTE of a tracking error signal is used to obtain an optimum focus bias. As you know, the tracking error signal is used for a tracking servo though it is produced from an RF signal like the HF signal (while HF signal is used for reproducing data recorded on the optical disc). See Abe, col. 4, lines 29-33 and 39-44. Because of this difference of the types of the signals used, in Abe it is necessary to obtain the traverse level of the tracking error signal and then perform complicated processing for the traverse level as shown in Figs. 3 and 4. See Abe, col. 4, line 59 to col. 5, line 11, generally, and col. 5, line 9 through col. 6, line 35.

For these reasons, amended claim 1 is patentably distinguished from Abe. The same argument applies to claim 7 which is amended to include the same limitation as claim 1.

Park '513 is cited for teachings pertinent to claims 4 and 5. Park does not suggest the distinguishing features of claim 1 discussed above. Accordingly, claims 4, 5 and 6 are patentable over Abe in view of Park.

In view of the foregoing amendments and remarks, applicant believes the application should be in condition for allowance. If any questions remain, the Examiner is requested to call the undersigned.

Respectfully submitted,

20575

Customer No.

MARGER JOHNSON & McCOLLOM, P.C.

By

Alexander C. Johnson, Jr.
Registration No. 29,396

210 S.W. Morrison Street, Suite 400
Portland, Oregon 97204
Telephone: (503) 222-3613